CLAIMS/

I claim:

5   1.   A method for regenerating a command
comprising:
        storing a linear command regeneration
template including a linear node template in a
memory; and
10   reconstructing said command using said linear
command regeneration template and data from a
database.

        2.   The method of Claim 1 wherein said storing a
15   linear command regeneration template further comprises:
        storing a begin option node template in said
linear node template.

        3.   The method of Claim 1 wherein said storing a
20   linear command regeneration template further comprises:
        storing a next option node template in said
linear node template.

        4.   The method of Claim 1 wherein said storing a
25   linear command regeneration template further comprises:
        storing an end option node template in said
linear node template.

        5.   The method of Claim 1 wherein said storing a
30   linear command regeneration template further comprises:
        storing a begin option node template, a next
option node template, and an end option node
template in said linear node template.

6. The method of Claim 1 wherein said reconstructing said command using said linear command regeneration template and data from a database further comprises:

5 filtering said linear command regeneration template to locate said linear node template.

7. The method of Claim 6 wherein said filtering said linear command regeneration template to locate
10 said linear node template further comprises: scanning said linear command regeneration template to find a begin option node template.

8. The method of Claim 7 wherein said filtering
15 said linear command regeneration template to locate said linear node template further comprises: obtaining an identification of said begin option node template.

20 9. The method of Claim 8 wherein said filtering said linear command regeneration template to locate said linear node template further comprises: scanning said linear command regeneration template to find an end option node template
25 including said identification.

10. The method of Claim 6 further comprising: passing said linear node template from said linear command regeneration template to an
30 evaluate branches process.

11. The method of Claim 10 further comprising: evaluating at least one branch in said linear node template from said linear command

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regeneration template by said evaluate branches
process.

12.   The method of Claim 10 wherein said
5 evaluating at least one branch in said linear node from
said linear command regeneration template further
comprises:
        finding a branch in said linear node
template.

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13.   The method of Claim 10 wherein said
evaluating at least one branch in said linear node from
said linear command regeneration template further
comprises:
15   validating said branch using said data from
said database.

14.   A memory storing a method for regenerating a
20 command, said method comprising:
        storing a linear command regeneration
template including a linear node template in a
memory; and
        reconstructing said command using said linear
25 command regeneration template and data from a
database.

15.   The memory of Claim 14 wherein said storing a
linear command regeneration template further comprises:
30   storing a begin option node template in said
linear node template.

16.   The memory of Claim 14 wherein said storing a
linear command regeneration template further comprises:

storing a next option node template in said
linear node template.

17.   The memory of Claim 14 wherein said storing a
5   linear command regeneration template further comprises:
storing an end option node template in said
linear node template.

18.   The memory of Claim 14 wherein said storing a
10   linear command regeneration template further comprises:
storing a begin option node template, a next
option node template, and an end option node
template in said linear node template.

15   19.   The memory of Claim 14 wherein said
reconstructing said command using said linear command
regeneration template and data from a database further
comprises:
filtering said linear command regeneration
20   template to locate said linear node template.

20.   The memory of Claim 19 wherein said filtering
said linear command regeneration template to locate
said linear node template further comprises:
25   scanning said linear command regeneration
template to find a begin option node template.

21.   The memory of Claim 20 wherein said filtering
said linear command regeneration template to locate
30   said linear node template further comprises:
obtaining an identification of said begin
option node template.

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22. The memory of Claim 21 wherein said filtering
said linear command regeneration template to locate
said linear node template further comprises:
        scanning said linear command regeneration

5   template to find an end option node template
        including said identification.

23. The memory of Claim 19 further comprising:
        passing said linear node template from said

10   linear command regeneration template to an
        evaluate branches process.

24. The memory of Claim 23 further comprising:
        evaluating at least one branch in said linear

15   node template from said linear command
        regeneration template by said evaluate branches
        process.

25. The memory of Claim 24 wherein said

20 evaluating at least one branch in said linear node from
said linear command regeneration template further
comprises:
        finding a branch in said linear node
        template.

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26. The memory of Claim 25 wherein said
evaluating at least one branch in said linear node from
said linear command regeneration template further
comprises:

30   validating said branch using said data from
        said database.

27. A network device comprising:
        a processor; and

a memory coupled to said processor, and
storing a method for regenerating a command
wherein upon execution of said method by said
processor, said method comprises:

5   storing a linear command regeneration
template including a linear node template in said
memory; and

reconstructing said command using said linear
command regeneration template and data from a

10   database.

28.   The network device of Claim 27 wherein said
storing a linear command regeneration template further
comprises:

15   storing a begin option node template in said
linear node template.

29.   The network device of Claim 27 wherein said
storing a linear command regeneration template further

20   comprises:
storing a next option node template in said
linear node template.

30.   The network device of Claim 27 wherein said

25   storing a linear command regeneration template further
comprises:
storing an end option node template in said
linear node template.

30   31.   The network device of Claim 27 wherein said
storing a linear command regeneration template further
comprises:
storing a begin option node template, a next
option node template, and an end option node

35   template in said linear node template.

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32. The network device of Claim 27 wherein said reconstructing said command using said linear command regeneration template and data from a database further

5   comprises:

filtering said linear command regeneration template to locate said linear node template.

33. The network device of Claim 32 wherein said

10   filtering said linear command regeneration template to locate said linear node template further comprises:

scanning said linear command regeneration template to find a begin option node template.

15   34. The network device of Claim 33 wherein said filtering said linear command regeneration template to locate said linear node template further comprises:

obtaining an identification of said begin option node template.

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35. The network device of Claim 34 wherein said filtering said linear command regeneration template to locate said linear node template further comprises:

scanning said linear command regeneration

25   template to find an end option node template including said identification.

36. The network device of Claim 32 further comprising:

30   passing said linear node template from said linear command regeneration template to an evaluate branches process.

37. The network device of Claim 36 further

35   comprising:

evaluating at least one branch in said linear
node template from said linear command
regeneration template by said evaluate branches
process.

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38.   The network device of Claim 36 wherein said
evaluating at least one branch in said linear node from
said linear command regeneration template further
comprises:

10   finding a branch in said linear node
template.

39.   The network device of Claim 36 wherein said
evaluating at least one branch in said linear node from
15   said linear command regeneration template further
comprises:
            validating said branch using said data from
said database.

20   40.   A structure for regenerating a command
comprising:
            means for storing a linear command
regeneration template including a linear node
template in a memory; and
25   means for reconstructing said command using
said linear command regeneration template and data
from a database.

41.   The structure of Claim 40 wherein said means
30   for storing a linear command regeneration template
further comprises:
            means for storing a begin option node
template in said linear node template.

42. The structure of Claim 41 wherein said means for storing a linear command regeneration template further comprises:

    means for storing a next option node template
5   in said linear node template.

43. The structure of Claim 40 wherein said means for storing a linear command regeneration template further comprises:
10   means for storing an end option node template in said linear node template.

44. The structure of Claim 40 wherein said means for storing a linear command regeneration template
15 further comprises:

    means for storing a begin option node template, a next option node template, and an end option node template in said linear node template.

20   45. The structure of Claim 40 wherein said means for reconstructing said command using said linear command regeneration template and data from a database further comprises:

    means for filtering said linear command
25 regeneration template to locate said linear node template.

46. The structure of Claim 45 wherein said means for filtering said linear command regeneration template
30 to locate said linear node template further comprises:
    means for scanning said linear command regeneration template to find a begin option node template.

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